

## **Memphis Light, Gas and Water Partners With Burns & McDonnell for a Multiyear Distribution Automation Program**

MEMPHIS, Tennessee — Memphis Light, Gas and Water (MLGW) is partnering with engineering, construction and architecture firm Burns & McDonnell in planning a five-year, \$132 million state-of-the-art [distribution automation](#) program. The work is designed to improve overall service reliability of the electric distribution grid and enhance system performance for the utility's 439,000 customers in Memphis and Shelby County.

The leading-edge distribution automation initiative will utilize fault location, isolation and service restoration (FLISR) capabilities — otherwise known as self-healing, smart grid technology — to help reduce the duration of power outages, reduce storm impacts, and restore service faster when outages happen.

“We are proud of the future-forward approach we’re taking with our self-healing, smart grid program in Memphis and Shelby County,” says Nick Newman, vice president of engineering and operations at MLGW. “One of the most critical components of this robust, modern electrical infrastructure system is the automated fault detection equipment, which will considerably improve overall service quality and reliability by being able to detect everything from minor surges to major outages.”

Through system intelligence, remote control devices and an advanced communications network, FLISR technology and advanced smart grid devices will allow MLGW to identify the location of a fault and then isolate the faulted area so that the impact and frequency of the power outage is minimized. It's projected the upgraded system will reduce outages in the area by 30%, and when outages do occur, customer minutes interrupted will be significantly lower.

Burns & McDonnell is providing planning and consulting services. This involves evaluating, budgeting and coordinating the equipment and systems needed to strengthen the utility's reliability. It also includes performing a strategic analysis of MLGW's distribution needs; assessing substation, distribution, SCADA systems, and communication assets for compatibility with an automated system; and developing a master plan for the distribution automation program, which will initially automate 50% of MLGW's energy distribution circuits, with a future long-term goal of 90%.

“We are honored to have the chance to work on such an innovative program and are thrilled MLGW selected Burns & McDonnell based on the strength of our practical experience and long history of working with electric utilities,” says Dotun Famakinwa, vice president of the Transmission and Distribution Group in Atlanta for Burns & McDonnell. “We’re going to put our

experience of developing some of North America's most significant [electrical transmission and distribution](#) projects to good use by helping the residents of Memphis and Shelby County, who will benefit from this system upgrade for years to come.”

As part of the distribution automation, MLGW is launching its Accelerated Recloser Deployment Program, which calls for the installation of hundreds of intelligent devices each year on distribution lines across the area. Reclosers, which are frequently used in place of traditional fuses, test if faults are temporary and, if so, can restore power rapidly with minimal noticeable interruption. When a fault occurs, the devices automatically open, interrupting electrical current, and then automatically close to detect if the fault is still active.

The next phase of implementation of the program is set to begin later this year and will result in numerous short-term job openings in construction and engineering.

Burns & McDonnell is ranked No. 1 in Power, No. 2 in Telecommunications and No. 10 among the Top 500 Design-Build Firms in the Southeast by *Engineering News-Record* (2022).

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### **About Burns & McDonnell**

Burns & McDonnell is a family of companies bringing together an unmatched team of 10,000 engineers, construction and craft professionals, architects, and more to design and build our critical infrastructure. With an integrated construction and design mindset, we offer full-service capabilities. Founded in 1898 and working from more than 60 offices globally, Burns & McDonnell is 100% employee-owned. Learn how we are [designed to build](#).